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ABSTRACT

2   Hybrid interpolation methods are provided that employ more than one interpolation algorithm

3   and choose the most appropriate interpolation algorithm that provides high quality images with

4   a minimum processing time. Prediction means is first applied to predict which interpolation is

5   most appropriate for a given pixel in terms of complexity and performance. Then, a simple

6   interpolation algorithm is used for pixels for which the simple interpolation algorithm provides

7   acceptable performances and a complex interpolation algorithm is used for pixels for which the

8   complex interpolation algorithm, which requires a larger number of operations, significantly

9   outperforms the simple interpolation algorithm. Consequently, it is possible to obtain high

10   quality images without significantly increasing the processing time.